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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|---------------|----------------------|---------------------|------------------|
| 10/586,859 | 01/22/2007 | Kazuhide Fujimoto | Q95835 | 2918 |
| 23373 7590 12/07/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | EXAMINER | |
| | | | LOEWE, ROBERT S | |
| | | | ART UNIT | PAPER NUMBER |
| WASHINGTO | 511, 50 20057 | | 1796 | |
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| | | | MAIL DATE | |
| • | | | 12/07/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|--|--|--|--|--|
| | 10/586,859 | FUJIMOTO ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Robert Loewe | 1796 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, | | | | | |
| WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION IN THE PROPERTY OF THIS COMMUNICATION IN THE PROPERTY OF THE PROPERT | DN. timely filed m the mailing date of this communication. IED (35 U.S.C. § 133). | | | |
| Status | | • | | | |
| 1) Responsive to communication(s) filed on 22 Ja | nuary 2007. | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | |
| , | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-7 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1-7</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | doction requirement | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner | r. | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| | | | | | |
| | | | | | |
| Attachment(s) | n □ 1=4, -1= 0 | (DTO 442) | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date | | | | | |
| Information Disclosure Statement(s) (PTO/SB/08) Solution Sol | | | | | |

DETALIED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al. (US Pat. 6,369,187).

Claim 1: Fujita et al. teaches a composition comprising (A) an oxyalkylene polymer having a molecular weight up to 30,000 and contains a hydrolyzable silyl group in each molecule (3:20-45) wherein, for example, 0.67 equivalents of hydrolyzable silyl groups are present relative to the total amount of the functional groups in a precursor of said oxyalkylene polymer, said functional groups allowing introduction of the hydrolyzable silyl group into said oxyalkylene polymer (example 1), (B) a tackifier resin such as phenol and epoxy resins (5:53), and (C) a curing catalyst (4:17-62). Specifically, in regards to the ratio of equivalents of hydrolyzable silyl groups to the total amount of functional groups of the polymer precursor, example 1 of Fujita et al. shows a reaction of a polyoxypropylene triol (3 equivalents -OH per equivalent of polymer) with a silane-capping agent (2 equivalents of hydrolyzable methoxy groups per equivalent of silane capping agent). The triol and capping agent are coupled under equimolar conditions.

Therefore, there are two hydrolyzable alkoxysilyl groups for every three hydroxyl groups of the

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triol. Thus the ratio of alkoxy silyl groups to alcohol groups in the final polymer composition is 2/3, or 0.67.

Claim 2: Fujita et al. further teaches that the polydispersity is not greater than 1.5 (abstract).

Claims 4 and 6: Fujita et al. further teaches that the hydrolyzable group in the hydrolyzable silyl-group containing polymer (A) is represented by the formula (I) of instant claims 4 and 6 [formula (I) on top of column 2]. In formula (I) of Fujita et al., m can be equal to 0, which anticipates general formula (I) of instant claims 4 and 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 3, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. as applied to claims 1 and 2 above, and further in view of Hirose et al. (US Pat. 4,463,115).

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Claims 3 and 5: Fujita et al. teaches the composition of instant claim 1 as described above. Fujita et al. further teaches that the polydispersity is not greater than 1.5 described in instant claim 2 above. Fujita et al. does not explicitly teach that the tackifier resin (B) is present from 5 to 150 parts by weight per 100 parts by weight of polymer (A). However, Hirose et al. teaches a similar composition comprising a polyoxypropylene polymer having hydrolyzable silyl groups and a tackifier (abstract). Hirose et al. also further teaches that the tackifier is added from 10 to 140 parts by weight per 100 parts by weight of the polyoxypropylene polymer having hydrolyzable groups (3:20-22). At the time of invention, a person having ordinary skill in the art would have found it obvious to employ the tackifier as taught by Fujita et al. in the amounts as taught by Hirose et al. and would have been motivated to do so because Hirose et al. teaches that when the tackifier is employed at less than 10 parts by weight, the adhesive strength is compromised and when the tackifier is employed at greater than 140 parts by weight the curing rates are compromised (3:22-29).

Claim 7: Fujita et al. further teaches that the hydrolyzable group in the hydrolyzable silyl-group containing polymer (A) is represented by the formula (I) of instant claims 4 and 6 [formula (I) on top of column 2]. In formula (I) of Fujita et al., m can be equal to 0, which anticipates general formula (I) of instant claims 4 and 6.

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Relevant Art Cited

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The prior art made of record and not relied upon but is considered pertinent to applicants

disclosure can be found on the attached PTO-892 form.

Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Robert Loewe whose telephone number is (571) 270-3298. The

examiner can normally be reached on Monday through Friday from 9:30 AM to 7:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RSL 26-Oct-07 MARK EASHOO, PH.D.

SUPERVISORY PATENT EXAMINER

05/ Dec/07